

REMARKS

As a result of this amendment, claims 7-21 and 28-38 are now pending in this application. Of these, claims 7-21 stand rejected, and claims 28-38 are newly added. New claims 28-38 find support at least at Figure 1 and/or page 3, lines 23-25.

Reservation of Rights

Applicant reserves the right to exercise any rights not exercised in connection with this response, including, for example, the right to rebut any tacit or explicit characterization of one or more of the cited references, the right to swear behind one or more of the cited references, the right to challenge the availability of one or more of the references under 35 USC 102, and the right to rebut any asserted combination and/or asserted motivation for combination.

Affirmation of Election

As provisionally elected by Applicant's representative, Eduardo Drake, on February 25, 2002, Applicant elects to prosecute the invention of Group II, claims 7-21.

The claims of the non-elected invention, claims 1-6 and 22-27, are hereby canceled. However, Applicant reserves the right to later file continuations or divisions having claims directed to the non-elected inventions.

Response to Drawings Objections

The drawings were objected to under 37 CFR 1.83(a). Specifically, the Examiner asserted that the aggregate image signal recited in claims 7 and 13 and the analog-to-digital converter recited in claims 8, 11, 14, 17, and 20 were not shown in the drawings. In response, applicant notes that Figure 2 shows summer 210 as having image inputs from pixels 202, 204, 206, and 208 and as providing an output signal (or connection) that carries an aggregate image signal to amplifier 212. As such, applicant believes the 7 and 13 is properly supported by the figures. In further response, applicant has amended claims 8, 11, 14, 17, and 20 to recite the summer as comprising a "digital summer."

Accordingly, applicant respectfully requests that the drawing objections be withdrawn.

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Response to §102 Rejections

Claims 7 and 10 were rejected under 35 USC § 102(b) as anticipated by Matsumoto (U.S. Patent 3,906,389). In response, applicant has amended claims 7 and 10 to more readily distinguish from Matsumoto.

Specifically, amended claims 7 and 10 now require first and second group pixels, with the first group pixel comprising two or more photodetectors for providing two or more corresponding pixel image signals, and the second group pixel comprising two or more photodetectors for providing two or more corresponding pixel image signals.

In contrast, Matsumoto's Fig. 1 shows only two photodetectors PD1 and PD1 with their outputs coupled to difference amplifier DA and to adder amplifier AA. Matsumoto uses the output of adder amplifier AA to control the gain of difference amplifier DA, in an automatic focusing system.

Response to §103 Rejections Based on Matsumoto

Claims 8, 9, 11, and 12 were rejected under 35 USC § 103(a) as unpatentable over Matsumoto.

In response, applicant submits that claims 8, 9, 11, and 12 stem from claims 7 and 10 and thus distinguish from Matsumoto for at least the reasons highlighted for claims 7 and 10. Accordingly, applicant requests respectfully that the 103 rejections of these claims be withdrawn.

In further response, applicant notes that in making the rejections, the Examiner asserts that "it would have been obvious ... to provide an A/D converter and a digital amplifier in the apparatus of Matsumoto et al. to provide more noise resilient signals and also to allow for faster processing by microprocessors." (Page 5 of Action.) However, Matsumoto lacks a microprocessor, and thus it would not appear that one would have been motivated to add either an A/D converter or a digital amplifier to support it. Additionally, it is not clear that Matsumoto's servo mechanism would operate as intended, for example, as fast, if converted to the digital realm. Thus, it appears that the Action fails to set forth a prima facie case of obviousness.

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Response to §103 Rejections Based on Smitt and Clark

Claims 13-21 were rejected under 35 USC § 103(a) as being unpatentable over Smitt (U.S. Patent No. RE37,282) in view of Clark et al. (U.S. Patent No. 6,133,563).

In response, applicant notes that the 103 rejection is premised on a misreading of Smitt. In particular, the rejection treats items 26 and 27 as a summer. However, Smitt indicates in Fig. 2 that item 26 is a multiplexer and that item 27 is an A/D converter. Moreover, Smitt states, at column 7, lines 3-6, "[t]he signals from the CCD cameras 1a-1c are stitched together as described in U.S. Pat. No. 5,117,295, and this [is] done under controlled [sic] in the multiplexer 26." It does not appear that one of ordinary skill would regard the term "stitched" as synonymous with or indicative of the function of a summer.

In addition to misreading Smitt, the Action fails to set forth a motivation for combining Smitt and Clark. The Action states "Smitt does not specifically disclose the photodetector circuits as claimed. Clark et al. teaches (see Figure 1) conventional pixels comprises It would have been obvious at the time the invention was made to provide such pixel configuration in the apparatus of Smitt in view of Clark et al as conventionally known." However, nothing in this passage amounts to a teaching or suggestion to combine Smitt and Clark.

Thus, not only is the 103 rejection based on a misreading of Smitt, it also fails to provide a teaching or suggestion for combining Smitt and Clark as required by MPEP 2143. Accordingly, the 103 rejection fails to set forth a prima facie case of obviousness and should be withdrawn.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9593 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

DAVID J. MCELROY ET AL.

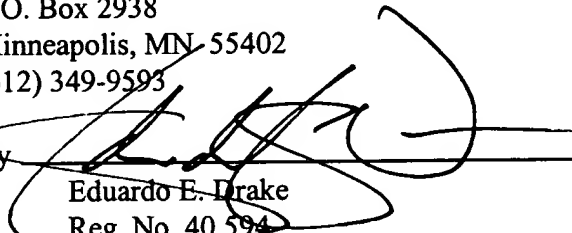
By their Representatives,

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Date

04 June 2002

By


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 4 day of June, 2002.

Name

Tina Kohout

Signature

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